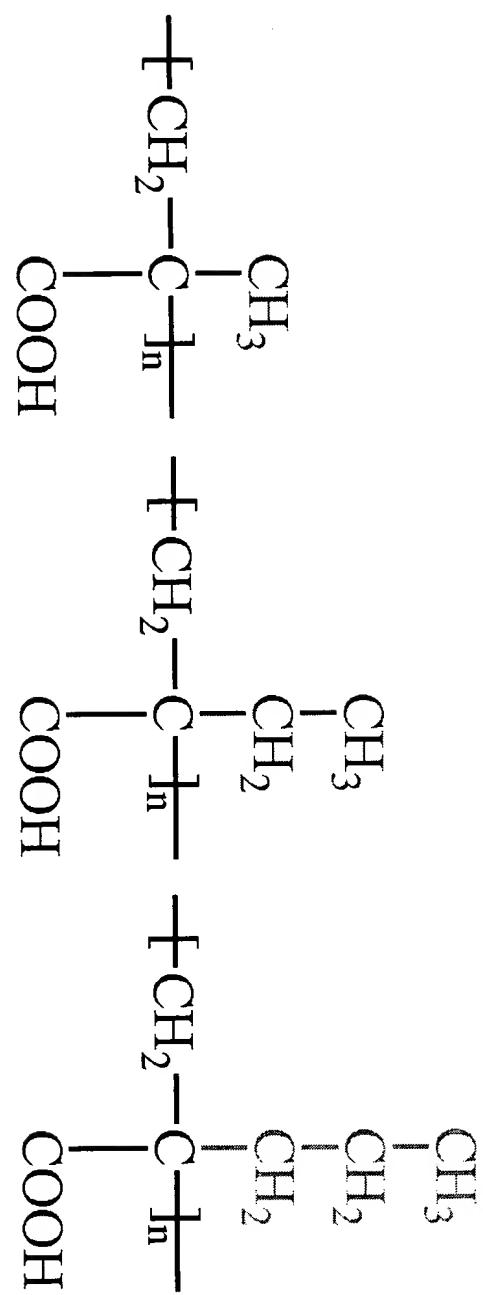




# Synthetic pH-Sensitive Polymers



Poly(methylacrylic acid)   Poly(ethylacrylic acid)   Poly(propylacrylic acid)

(PMAA) (PEAA) (PPAA)

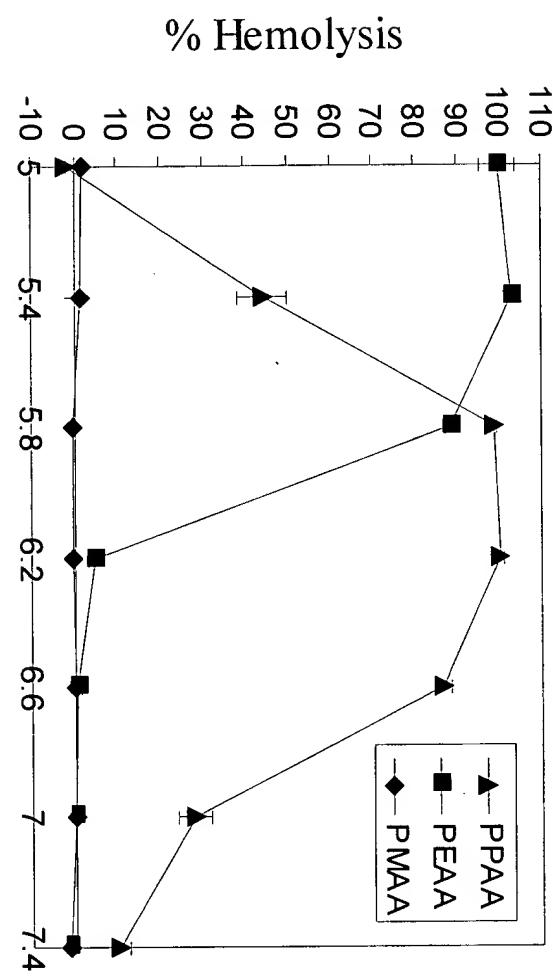
- PEAA and PPAA are pH-sensitive membrane-lytic polymers

## FIGURE 1



# pH-Sensitive Hemolysis\*

\* Hemolysis results obtained using 10 $\mu$ g/ml polymers

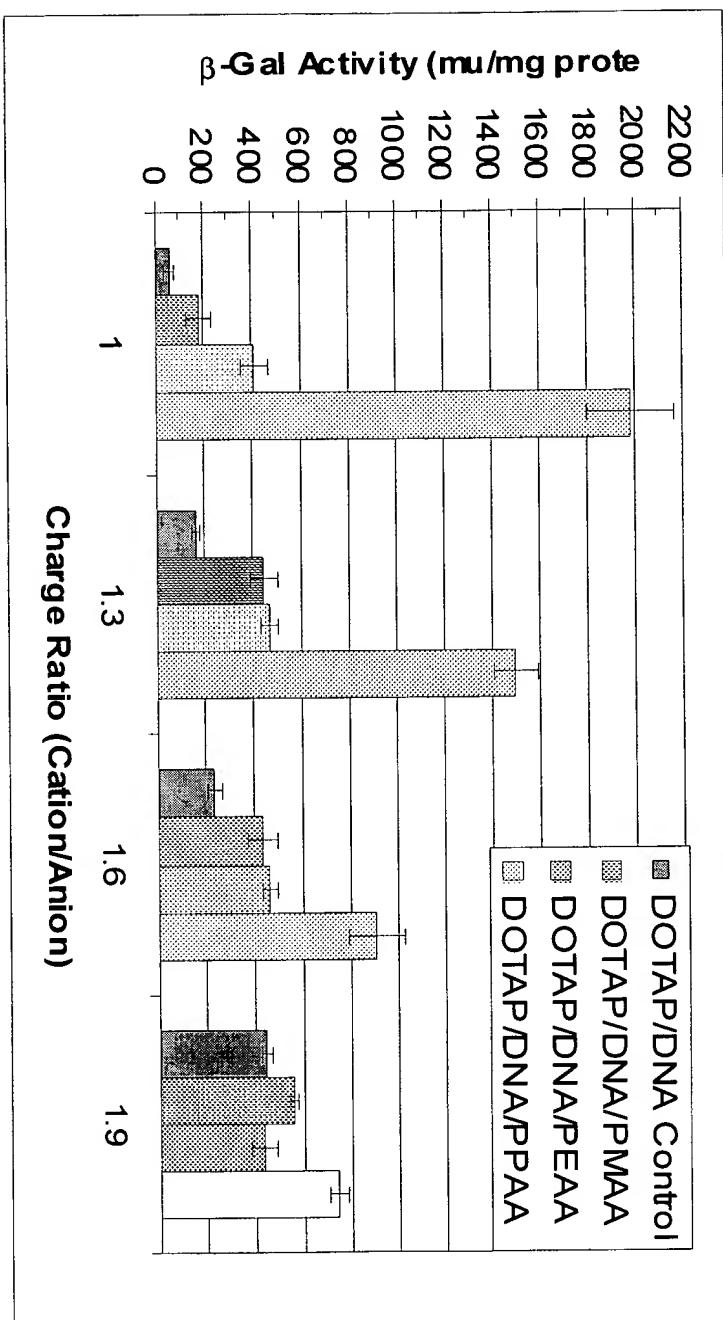


## Conclusions:

- Both PEAA and PPA show hemolytic activity within pH range for endosomal acidification
- Only PPA shows activity at the higher pH range of early endosomes, which may allow for a greater fraction of intact macromolecules to escape from endosomes

## FIGURE 2

Effect of Alkyl Group of Poly(alkylacrylic acid) on Transfection



Polymer MW's: PMAA (52kD), PEAA (43kD), PPAA (61kD)

FIGURE 3

